

1/10

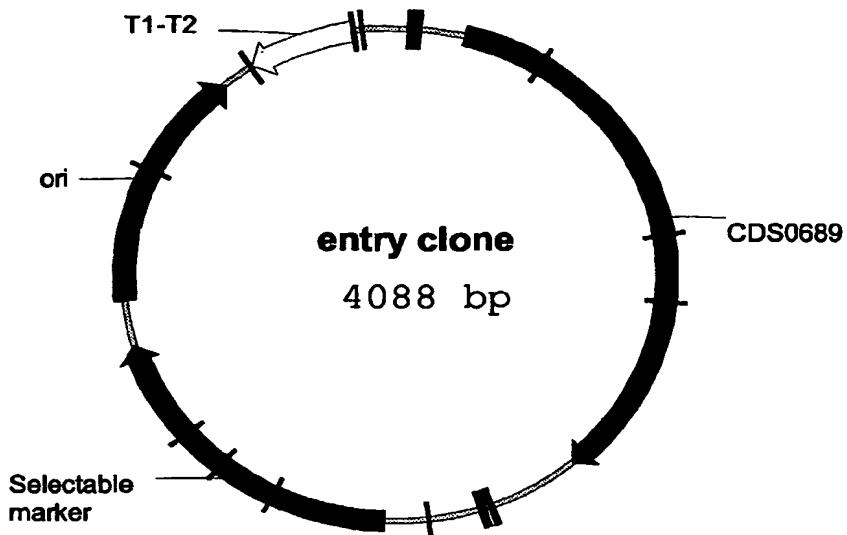


FIGURE 1

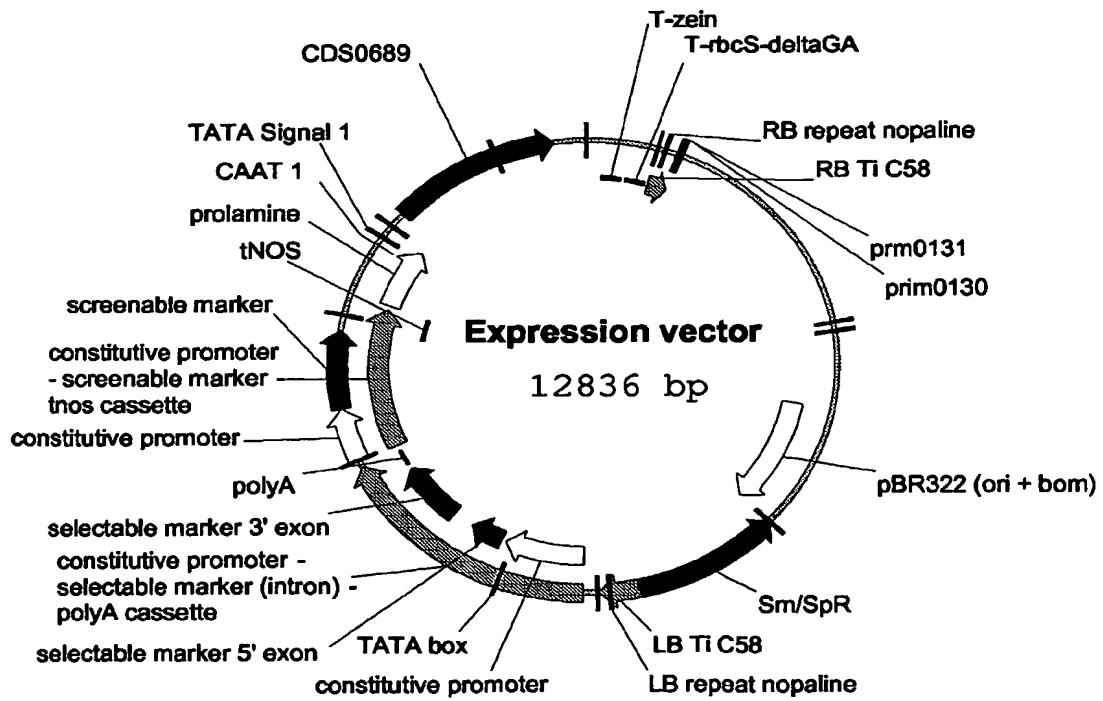


FIGURE 2

2/10

		<b>Motif 1</b>	40
CDS0689	(1)	----MSVLOYPEGIDPAVQVNNAAFDNGDSEDLSEIKR	
CDS0689 At	(1)	----MTSHEATETLNAPPKEQQNNIAAFDDGGSQINSAIEA	
CDS0689 Medicago trunculata	(1)	----MNNNNNNNILLHSTQVQVNNIAAFSGEDFAMNSSSDS	
CDS0689 Os	(1)	----MEEDPLPPLVHVNNIAAFDSSCSPEAWIPO	
CDS0689 Ta variant	(1)	----MMEEDPLPPLVHVNTIAAFSSGSSSAWHAHA	
CDS0689 So	(1)	----MEEDPLPPLVHVNNIAAFDHASSSAWHAHSP	
CDS0689 Zm variantrev	(1)	----MEEDPLPPLVHVNNIAFPDCHASSSAWHAHSP	
CDS0689 So variant	(1)	----MEEDPLPPLVHVNNIAFPDCHASSSAWHAHSP	
CDS0689 Bn est1	(1)	----MTSTEHTETLNAPFQIINNAIAFDGDSNLSIISIEA	
CDS0689 Eschscholzia californica	(1)	----MLEISETLNAPFQIINNAIAFDGDSNLSIISIEA	
CDS0689 Ga est1	(1)	----MSLQYPSTFNPQIINNAIAFDGDSNLSIISIEA	
CDS0689 Pt	(1)	----MSSVLOYPPDVDAPEVQVNNNAFDNGDSECLNIKS	
CDS0689 Plumbago zeylanica	(1)	----MNEVILHQAARTDSSTIHOQNNIAFSGSESDPVID	
CDS0689 Citrus sinensis	(1)	----MSVLOYPNTLNGOQIINNAIAFDNGDSESDTAKG	
Consensus	(1)	I E IPEVQIWNNAAFD GDS S AI	
		<b>Motif 2</b>	80
CDS0689	(37)	--SWSPLKPLSVRPSDFPESDLSSSINOTLFFENSSVNLS	
CDS0689 At	(38)	SSWSHLN----ESFDSSCS-----NOFFISVSSSLQSS	
CDS0689 Medicago trunculata	(38)	-----IENLNPSAFN-----	
CDS0689 Os	(32)	---SP-----AAVAVRKGDENHREPEVVD-----	
CDS0689 Ta variant	(33)	-----TPVRRGEKFNRRPAETN-----	
CDS0689 So	(32)	-----VPASVRRREGEDEENHREDPDPE-----	
CDS0689 Zm variantrev	(32)	-----SPAPASAREGEGDDEILRPEPDV-----	
CDS0689 So variant	(32)	-----ARASAGHEAPGDENHREDPDPE-----	
CDS0689 Bn est1	(37)	-----SWSNLMSFDSDCS-----OIVVSVSSSLKSS	
CDS0689 Eschscholzia californica	(35)	-----ASSSPLKPIVLNQSEESILDSTYH-----OTSCCISPVRTK	
CDS0689 Ga est1	(37)	-----SWCNFNS-----GSVNQSLESDGSE-----QSLWIKSPVSK	
CDS0689 Pt	(38)	-----SWWNQSLPDSN-----LSPVCEQSSPVFV	
CDS0689 Plumbago zeylanica	(41)	-----F-----SAPNLSQLLSDSS-----L-----SLAEMPHPAK	
CDS0689 Citrus sinensis	(37)	-----SWANLKS-----VYMNQSL-----C-----L-----S-----L-----S-----L-----S-----L-----S-----P-----T-----S-----S-----L-----P-----T-----S-----S-----L-----K-----S-----P-----T-----S-----S-----L-----E-----S-----D-----G-----K-----E-----N-----P-----S-----	
Consensus	(41)		
		81	120
CDS0689	(75)	SPLPIKPLNPNGALENSRLKPNPKNSQSLDEMAARKSGK	
CDS0689 At	(69)	VSITEAPS-----AKSKTVKTKSAADRSKK-----	
CDS0689 Medicago trunculata	(49)	---IVPS-----SNK-----	
CDS0689 Os	(53)	---VAAAG-----	
CDS0689 Ta variant	(50)	-----	
CDS0689 So	(54)	-----	
CDS0689 Zm variantrev	(55)	-----	
CDS0689 So variant	(54)	-----	
CDS0689 Bn est1	(67)	VSFSTDDP-----IRCGKVK-----EKPH	
CDS0689 Eschscholzia californica	(75)	SPLPIKELHPNG-----	
CDS0689 Ga est1	(72)	STASVVKP-----LSSKNVTGNTRPFSAKMKGVCKE	
CDS0689 Pt	(66)	NSSKPAKPLQ-----	
CDS0689 Plumbago zeylanica	(73)	SPMQK-----	
CDS0689 Citrus sinensis	(72)	KSCVPNPKPLQVN-----SSVKNSQMKQLK-----SVSK	
Consensus	(81)		
		<b>Motif 3: coiled coil</b>	160
CDS0689	(115)	GNDFRDEKKDDEIEEEIQMEISRLSSRLEALP-----EKAETKV	
CDS0689 At	(94)	-----RDI-----DAEIEEEKEIGRLS-----LESL-----EKAEQTA	
CDS0689 Medicago trunculata	(56)	-----RTDDEIAEIESEIKRLS-----KLELLR-----EKAERKI	
CDS0689 Os	(57)	-----YDVEAFIGHIEAEILRLSSRLHHLR-----PSKQPEPN	
CDS0689 Ta variant	(50)	-----DADAETARIEAEILRLSSRLHHLR-----PSKQPEPN	
CDS0689 So	(54)	-----DVDAEIGHIEAEILRLXSRLHHLR-----TSKQSEPS	
CDS0689 Zm variantrev	(55)	-----EEEMRHIEAEILRLS-----LRLRTSQQLQPP	
CDS0689 So variant	(54)	-----DVDAEIGHIEAEILRLSSRLHHLR-----TSKQSEPP	
CDS0689 Bn est1	(86)	-----KTGKVRHGD-----DAEIEEEKE-----MNRISIRLES-----EKAEQIA	
CDS0689 Eschscholzia californica	(87)	-----	
CDS0689 Ga est1	(105)	-----EEKKRDEKKDDEIEEEIEKE-----VRLS-----LESL-----EKPNIHQ	
CDS0689 Pt	(76)	-----	
CDS0689 Plumbago zeylanica	(78)	-----	
CDS0689 Citrus sinensis	(100)	-----EEETRDERK-----DIEIEEEIEKE-----VRLS-----LESL-----EKPNIHQ	
Consensus	(121)	ID EI IE EI RLSSRL LRL K	

**FIGURE 3**

3/10

	401	440
CDS0689	(339) IQSSVVRKRSIPENDKDESKRNDKKRSLSVGKTRVSQTES	
CDS0689 At	(294) TGKEDVRKRSIPEDEEKENHKRSEKR-----RASDESN	
CDS0689 <i>Medicago trunculata</i>	(284) GGD--ARKRSFSEN-----N	
CDS0689 Os	(297) AAAATAKRMAGSSKMRVIPSRYSTTPGSLQSSGAQERR	
CDS0689 Hv contig 123	(111) ISTASTCRPAGSSKVVVPSRYSITPGSLSLAVSQDKRS	
CDS0689 Ta contig	(1) -----GRYSIMPGLGAASQERR	
CDS0689 Zm partial	(87) TSNVATTKRPAGSSKVVVPSRYSITPPGSLAVTQGNRC	
CDS0689 Sacc sp 3'	(84) TSNATAKRPAGSSKVVVPSRYSITPGSLLAVSQDKRS	
CDS0689 <i>Pinus taeda</i> 3'	(1) -----	
Consensus	(401) KR R RYSL PGA LG	
	441	480
CDS0689	(379) KNL---GRESRVKKRWEIPSEIVVHGNTSEKSPLSIVK	
CDS0689 At	(327) K-----SEGRVKKRWEIPSEVDLYSSGEN--GDESPIVK	
CDS0689 <i>Medicago trunculata</i>	(297) KGL--GSEIRAKKRWEIPIEEVIVSG-----FVIM--	
CDS0689 Os	(337) KIQSLPGSSGDANQNEEIRAKVPSN--DPLSPAKVSKV	
CDS0689 Hv contig 123	(150) KESLPGSITGSGQEEEIKVPTEPVD--DDLSPESSIDKV	
CDS0689 Ta contig	(21) KESLPGSITGGAGQKEEEIKVPTEPVD--DDLSPESSIDKV	
CDS0689 Zm partial	(127) KQS---LPGSATETRNLTEPPNDE---LSPEIYAKV	
CDS0689 Sacc sp 3'	(124) KQS-LPGPASAASQREEIRAKLTPSK--DELSPEIYAKV	
CDS0689 <i>Pinus taeda</i> 3'	(1) -----XEARISFTGNSAIMAGGTKEPLRREH	
Consensus	(441) K GS R EI A E LSPESL KV	

## Motif 4

	481	520
CDS0689	(416) PDLPIRPIRIARCVNELLPSPPARMILILGKRSFFSDE	
CDS0689 At	(359) --EIPKIRTRRVGGSPEDSGAAKRVAVLCA-----	
CDS0689 <i>Medicago trunculata</i>	(324) --EIPKIRTRMRFVDESPRDSGAVKVAALNGRSFICDED	
CDS0689 Os	(375) AEIIPKIRTMPPDDESPPDGGCAKRVAVLVGKRSFFTAA	
CDS0689 Hv contig 123	(188) AEIIPKIRTMPPDDESPPDGGCAKRVAVLVGKRSFFAA	
CDS0689 Ta contig	(59) AEIIPKIRTMPPDDESPPDGGCAKRVAVLVGKRSFFAA	
CDS0689 Zm partial	(158) AEIIPKIRTMPPDDESPPDGGCAKRVAVLVGKRSFFTAA	
CDS0689 Sacc sp 3'	(161) AEIIPKIRTMPPDDESPPDGGCAKRVAVLVGKRSFFTAA	
CDS0689 <i>Pinus taeda</i> 3'	(29) KMKIPKIRTRTTESPRDGGCAKRVAVLVGKRSFFAPD	
Consensus	(481) AEIIPKIRTMPPDDESPPDGGCAKRVAVLVGKRSFF AAA	
	521	560
CDS0689	(456) -----DKEPPVCQVLSFAEEDAEEE-----	
CDS0689 At	(389) -----DRNFTFCQELKFE-----	
CDS0689 <i>Medicago trunculata</i>	(361) EEEERVMVEEEGGSVCQVLNFAEDDDDDDDYGEQG-----	
CDS0689 Os	(415) -----EDGRALDVEAPEAVAEA-----	
CDS0689 Hv contig 123	(228) AGD---GSAISSYQARVILAEAPPEAAAAAGALSDEAAAAG	
CDS0689 Ta contig	(99) AGD---GSAISSYQARVILAEAPPEAAAAAEGDEAASA	
CDS0689 Zm partial	(198) DDG---NLVTPYQARVILAEAPPEAAAAEEAEA-----	
CDS0689 Sacc sp 3'	(201) EDG---NFVTPYQARPVGEL-----	
CDS0689 <i>Pinus taeda</i> 3'	(69) ITST--PSIDXXDACKPLRRESVHEIXHAXXX-----	
Consensus	(521) ARVLE EA E	
	561	592
CDS0689	(476) -----	
CDS0689 At	(403) -----	
CDS0689 <i>Medicago trunculata</i>	(395) -----	
CDS0689 Os	(432) -----	
CDS0689 Hv contig 123	(265) ALSDEAAAAAAEALSDEAAAAEALSDEAAA	
CDS0689 Ta contig	(136) GEALGDEAAA-----	
CDS0689 Zm partial	(226) -----	
CDS0689 Sacc sp 3'	(217) -----	
CDS0689 <i>Pinus taeda</i> 3'	(99) -----	
Consensus	(561)	

FIGURE 3 (continued)

4/10

SEQ ID NO 1: *Nicotiana tabacum* seedy1 coding sequence  
(CDS0689)

**atgagtgtttacaataccagaaggattgacccagcagatgttcagatatggaaacaatgc**  
agcattgataatggagattctgaagatttgttctcgctgaaacgttggctccctctga  
aacccttcggtaggcattcagattccttgaatctgattgtcaagtaaggaaaatcaa  
actccttatttggagaattcatctgttaatctctcatctccggttaccataaagccacttaa  
ccctaattggggctctggaaaattcaagactcaagccgaacaagccaaattccaaacagagtc  
ttgatgagatggcggttagaaagagcgaaaggaaatgattccgtatgagaagaaaata  
gacgaggaaatttgaagaattcagatggagatttagtaggtttagttcaagattagaggctt  
gagaattgaaaaggctgagaaaactgttctaagactgttggaaaagcgaggaagggtgtgg  
cagcaaagtttatggagccaaaacaaagtgttattaagattgaagagcgtatataatgagt  
gcaagaacaaagggtggagcagagaagggtcttagtttaggaccatctgagattttactgg  
aacgcggcggcgagggtttagtatggccatcagatattctagcaggacaacaaaggcac  
ggcaattgggaaagcaagagatgattattactcttattcagccaataaaaaacaggcgaaag  
tcgtttttggaaagcttcaagagattgaagaagaggaaaaagttcaagccttagtcctaa  
atcaagaaaaactgtcaagaacaatggttacaacaaggcaggcagttactacaattgtcat  
caaagaagaatttggaaaaaaagatgatggacttttagttcagttcagccaaagaagttgttt  
aaagatctcgaaaagtctgctgctgctaataagaagccccagaggccggggagggtgtggc  
tagtaggtataatcagagtacaattcagttcatcagtagttagtggaaaagaggtcttacctgaaa  
atgataaggatgagagtaagagaaaatgataagaaaacggtcgttatctgttagggaaaacgcgt  
gtgtctcaaactgagagcaagaatttgggtactgaaagttaggtggaaaagagatggaaat  
tcctagttgagattgttagttcatggaaacacagagatgagaaatctccactaagcattattg  
tgaaggcctgatttgcctccgcattaggattgctcggtgtgtgaatgagactcttagggat  
tctggacctgctaaaagaatgatagagttgataggcaagaaaatcgttttagttagtgc  
agataaggagccacctgtcaagtttaagtttgcagaggaagatgtcaagaggaat  
**aa**

**SEQ ID NO 2: Nicotiana tabacum seedyl protein (CDS0689)**

MSVLQYPEGIDPADVQIWNNAAFDNGDSEDLSSLRWSPLKPLSVRPSDSFESDLSSKENQ  
TPLFENSSVNLSSPLPIKPLNPNGALENSRLKPNKPNQSLDEMAARKSGKGNDFRDEKKI  
DEEIEIQMEISRLSSRLEALRIEKAETVAKTVEKGRVVAAKFMEPKQSVIKIEERISMS  
ARTKVEQRRLGLSGPSEIFTGTRRRGLSMGPSDILAGTTKARQLGKQEMIITPIQPIQNRK  
SCFWKLQEIEEEGKSSSLSPKSRTAARTMVTRQAVTTIASKKNLKDDGLLSSVQPKKLF  
KDLEKSAANAKPQRPGRVVASRYNQSTIQSSVVRKRSLPENDKDESKRNDKKRSLSVGKTR  
VSQTESKNLGTESRVKKRWEIPSEIVVHGNTESEKSPLSIIVKPDLLPRIRIARCVNETLRD  
SGPAKRMIELIGKKSFFSDEDKEPPVCQVLSFAEEDAEEE

## FIGURE 4

5/10

**SEQ ID NO 3: *Oryza sativa* seedyl coding sequence**

atggaggaggaccgcctatccgcgtggccacgtctggaaacaacgcgcgccttcgacgactc  
 ctcgtgttccagatcggttggctccccaaagccccccgtcgccggccgtccgcgcaaggcg  
 acaaggagaatcaccgcggcggaggttggatgtcgccgcggctacgacgtcgaggccgag  
 atcggccacatcgaggcgagatcctcgccctctcgatccgcgatccaccatctccgcgtctc  
 caagcagccggagccaaaccgcgacgacgctccgatggggagatggatcgcaaggtgaggc  
 cccggccgagggccctcagcctcgccgcggatgtatctccatcgtaatcgatcgagaaag  
 catccgcgtcgccaccaaggcgcgcgcggatgtatctccatcgtaatcgatcgagaaag  
 ggagatcgccgcggcgaaccctagggtgcccgcggcgcgcgcgcgcgcgcgcgcgcgc  
 ctggcacggcgcggatcctgaaggccaaatcaaggagcctccggatcgatcgatcgatcg  
 agcctcgccgttggagatccaccacggcgatcgatcgatcgatcgatcgatcgatcg  
 caagccgttaccaccaagctcaacgcattcgatcgatcgatcgatcgatcgatcgatcg  
 ccgtcccccgcacccatggcgatcgatcgatcgatcgatcgatcgatcgatcgatcg  
 acagcagaagtcgagcgaaggcgaggagcccgagcccgaggccaggaggcaatccatgg  
 caaggctactgacacacaaggggaggcaacaaggatggatgatcgatcgatcgatcg  
 cgtcaagttagcggc  
 aagatgagggtcatcccgagccgtacagcctactcctggcgatcccttggaaagcagtgg  
 agcacagggagaggcgacgcgacgcgtctccaggatcatcgatcgatcgatcgatcg  
 agggaaatcagagcgaaggatcgatcgatcgatcgatcgatcgatcgatcgatcg  
 aaggatgtgaaatcgatcgatcgatcgatcgatcgatcgatcgatcgatcgatcg  
 ttccggatgcgccaagcgggttgcggatattgtcgatcgatcgatcgatcgatcg  
 ccgaggacggggcgccgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc  
 ccaccatggtttgcgttccatcgatcgatcgatcgatcgatcgatcgatcgatcg

**SEQ ID NO 4: *Oryza sativa* seedyl protein**

MEEDPLIPLVHWNNAAFDSSCSRSAWLPQSPAVAAVRKGDKENHRPEVDVAAGYDVEAE  
 IGHIEAEILRLSSRLHHLRVSKQPEPNRDDAPMGEVAKVRPRPRGLSLGPLDVISIVNREK  
 HPLRTKQPPATRGRGLSLGPMEIAAANPRVPAAQHQQQQRAGTARILKPIKEPPVQRRGV  
 SLGPLEIHHGVGSKAPAAARAKPFTTKLNAIREETRPSKQFAVPAKPWPSNTRQTLDSRQG  
 TAASRAKARSPSPRPRRQSNKGATDTRGGNKVVDELKPKGASSSQSGSAAAATAKRMAGSS  
 KMRVIPSRYSLTPGASLGSSGAQERRRKQSLPGSSGDANQNEEIRAKVIEPSNDPLSPQTIS  
 KVAEMLPKIRTMPPPDESPRDGCAKRAELVGKRSFFTAAAEDGRALDVEAPEAVAEA

**FIGURE 4 (continued)**

6/10

**SEQ ID NO 5: *Medicago trunculata* *seedyl* encoding sequence**

aaaaacgttaaggactaaaaatataaaaatttaagttagggattcataatggaagcacc  
 tatttacagggatcttaatataattaaccctaataatttatgacagaaaaccctttgaaatc  
 acatcgagcgtgtatgagtagccgttccacatccaacggccagtaagagcgttaactttatt  
 tcttcctcttcaatctccaacggtcacataatctctccaaatacacaataattcccttt  
 caacctcactcttcatttctcaacccaaacccaaaaactaatacagattcttcttaatct  
 taaaaaccttctccaaaagcacttaataaaaaaggacttaaccatgaataacacaaacaa  
 caacaacattcttcattccacacaggttcaagtgttgaacaacgcagcattcgatggtg  
 aagatttgcattcatattcatcttctgattccatcaaagagaatctaaacccatcgcattc  
 aacattttcccttcaacaaaagaactattgatgatgaaattgcggaaattgaaagtga  
 aattaagcgatttaacttcgaagcttgaattgttgcgttggaaaaagctgaaagaaaaatcg  
 cttctgaaaagcgtttagtggatt  
 ccgaagaaaaacgttacaccgaaacgaaacgggtgtcgaaaaatgggggggggggggggg  
 aaacgggtgtcgatccggataacgcggaaatctagggttaatttttttttttttttttttt  
 gtccgatggagattgcggggaaagtgtatggcaccgcggcgatgacgattactccggcgacg  
 gtgaatcgaggaagtcttcttcttgcggaaacccgggggggggggggggggggggggggg  
 gattactccggcgacggtaataggagggaaatcttgcgggggggggggggggggggggggg  
 aagaaaaatcgaagaaaaacgatttgcgggggggggggggggggggggggggggggggggg  
 tctcggttggatcgattaaagcggtgtgaagaaagatgttgcgggggggggggggggggg  
 gaagaagcttt  
 caagccgtataattccgggtgggtgggtgggtgtgcgggggggggggggggggggggggg  
 aataagggttt  
 ggatgtgagtt  
 cttagagattctgggtgtgttt  
 gatgaagatgaggaggagagagatgtatgggtgggggggggggggggggggggggggg  
 gaatt  
 tggatt  
 attt  
 atgttt  
 ttttataatgatgatggatttaatttttttttttttttttttttttttttttttttttt  
 tttcgtttagtattctgttt

**SEQ ID NO 6: *Medicago trunculata* *seedyl* protein**

MNNTNNNNILLHSTQVQVWNNAFDGEDFAMNSSDSIKENLNPSAFNIVPSSNKRTIDDEI  
 AEIESEIKRLTSKLELLRVEKAERKIASEKRVSGIGTGRIVAAKFMEPKKNVTPKRNGVVF  
 EETPKRNGVVS DTPKSRVNWRRGMSLGPMEIAGKVMAPPAMTIPATVNRKSCFWKPQESC  
 EVMPSGITPATVNRRKSCFLKPQESCEENRRKTICKPNLNNSNSVNSAVGSIKRVKKKDEE  
 IAQVQPKKLFEGEKSVKSLQGRIVASRYNSGGGGDARKRSFSENNKGLGSEIRAKKRWE  
 IPIEEVDVSGFVMLPKISTMRFVDESPRDSGAVKRVAELNGKRSYFCDEDEEEERVMVEEEGG  
 SVCQVLNFAEDDDDDDDYGEQG

**FIGURE 4 (continued)**

7/10

**SEQ ID NO 7: *Saccharum* sp. encoding sequence (partial 5' end)**  
 Cgcaccgcgagttcgaaaaaccaacctatcgccctcagatcacgcgaggacgcgagggga  
 agcaggaatccctccgctcccagccgcctcccgctcaccatcgatcgatcgccgtccg  
 gtccaggggctccggcggtggcgatggaggaggaccgcctatcccgtggcgcac  
 gtctggaaacaacgcgcgcctcgaccacgcgcctccgcgtggcgcacgcgcactccctgt  
 gcccgcgagcgcacgtcgcgaggcgaggggacaaggagaaccacccgcgcgcacc  
 ccgcacgtcgaggcgagatcgccacatcgaggcgagatctgcgcctgtncgcctn  
 caccacccctcgccaccccaagcagtggagccgtccaaagcgcggagaggtegcgc  
 cgcggcgaaggcgaagcggcgccggcgccggctgcggacgcgggggctcagcctggcc  
 cgctcgacgtcgccgctgcggtaaccccaacccgctcaccaccacaaccagcagcag  
 ccgcgtgcgcgcagggctcgaagccatcaagcaggcacggcggcggcggcaagggcgt  
 aagacttggcccccctcgacatggcggcgcaaccctaggccctccgccc

**SEQ ID NO 8: *Saccharum* sp. seedyl protein (partial N-term)**  
 MEEDPLIPLVHVWNNAFDHASSSAWAHSVPVAPASARREAEVDKENHRPDPDPDVEAEIGHI  
 EAEILRLXSLHHLRTSKQSEPSKRGEVAPAPAAKAKAAAARLRTGLSLGPLDVAAAGNP  
 NPLTTDNQQQPRAAQGLKPIKQATAAAAGKGVRLGPLRHGRR

**SEQ ID NO 9: *Zea Mays* seedyl encoding sequence (partial 3' end)**  
 ccacgcgtccggcggtcgagaggaggaaggccagcgttccaaggaggcacgcgcgtccgc  
 agaccgtggccatccagcaatgccaggcaccactggatgccaggcaaggcaccgcagcaag  
 cagagccaaaggcgaggagcgggagcataagccccagcaggttcaggaggcagtccacttca  
 aggctgcgcagacaagagcggaaatgccaagcctacagaggcgcacgcggaggagcgaag  
 gcggtaatcacaccagcaatgttagccacgcgaagaggccggggagctcaaggtag  
 ggttgtcccgagccgctacagcatcccacctggctcccttagcagctgtgacacaaggca  
 accgatgcaagcagtctccaggatcggtacttgagaccagagtaatctcaactgagccg  
 ccgaacgacgagtgtctctgaagaacttgcagggttcaggactgctcccaaggattag  
 gaccatgccgcctctgatgagagccgcgtgactcggatgtgccaagcgtgtgctgatt  
 tggtcgggaagcgtatccttctactgctgcaggacgatggcaatctcgatccctac  
 caggcacgggtgggtgaacttgaatcacccgaggcagcagcagaagaagcagaagcttgaga  
 agtttgtttgtatcaatttcaagggttgcatttttttttttttttttttttttttttttt  
 agacattgttagtactttgtttgttgcatttttttttttttttttttttttttttttttt  
 nccttgg

**SEQ ID NO 10: *Zea Mays* seedyl protein (partial C-term)**  
 TRPAVREEEGQRSKEHAVPARWPSSNARHPLDARQGTAAKSRAKARSGSISPSRFRQSTS  
 KAAETRAGNAKPTEATRGGSEAVNHTSNVATTKRPAGSSKVRVVPSSRYSIPPGSSIAAVTQGN  
 RCKQSLPGSATETRVNLTEPPNDELSPEELAKVAELLPRIRTMPPSDESPRDSGCAKRVADL  
 VGKRSFFTAAGDDGNLVTPYQARVVELESPEAAEAE

**FIGURE 4 (continued)**

8/10

SEQ ID NO 11: *Arabidopsis thaliana* seedyl coding sequence

atgacatcaattgaggcaacagaaaacgcttaacgctcctccaaagcttcagatctggAACAA  
cgctgccttcgacgatggagattctcaaattcacttccgcattcgaaagcttcttggcttc  
acctaacaatcattcgattccgattgttagcaagagaatcagttccgatttgcggattcc  
tcttcgctccaaatcctcagtcgtcgtcaccgaagctccgtcagcaaattccaagaccgtgaa  
gaccatccgcccgcagatcgaggtaaaaagcgagatatcgatgcagagatcgaagaagtag  
agaaggagatcggacgattatcgacgaaattggagtcgctcgatttagagaaggcggagcaa  
accgcaagaagcattgtctatacgtdgaaatcgttccggcgaagttcatggaatcatctca  
gaaacaagtgaaattcgacgattcggtttacaggatcgaaatcaagagccactcgtagag  
gcgttagtcttgaccagcggagatattcaattccgcgaagaaatctgaaaactgtgactcct  
cttcaatcagctcagaatcgacgcaagtctgttttaagcttcctggaatcgaagaagg  
tcaagtgacgacacgaggtaaaggaaagaacgagttgagtcgtcgtccgagatctcgcaag  
cgaaaatgacggcagctcagaagcaagcagctacgacgggtgggtcaaagagagctgtgaaag  
aaagaagaaggagttctttaacaatccagcctaagaggctattcaagaagatgaaaagaa  
tggttttttaaggaaaccattgaaaccaggaaagagttgtggtagtaggtacagtcaaattgg  
gtaaaacgcagactggagagaaaagatgttaggaaaaggtcggtgcctgaggatgaagagaaa  
gagaatcataagaggtcgagaaagagaagagagcttctgatgaaagtaacaagagatgaaaggag  
agtgaagaagagatggagattccaagtgaagttgatctgtatagcagtggtagaaacggtg  
acgagttctctatagtttaaggagactacctaagatcagaacgcctcgctgtggagggagc  
cctcggtattcaggtgctgctaagagagttgcagaattacaagccaaaggatcgtaacttcc  
ttttgccagttctgaaagttgaagaatgatccgcttatcaatttgagtaaaaatcca  
caactttgttgggtt

SEQ ID NO 12: *Arabidopsis thaliana* seedyl protein

MTSIEATETLNAPPKLQIWNNAAFDDGDSQITSAIEASSWSHLNESFDSDCSKENQFPISVSSLQSSVSITEAPSAKSKTVKTKSAADRSKKRDIADAEIEEVEKEIGRLSTKLESLRLEKAEQTARSIAIRGRIVPAKFMESSQKQVKFDDSCFTGSKSRATRRGVSLGPAEIFNSAKKSETVTPLQSAQNRRKSCFFKLPGIEEGQVTTRGKGRTLSLSPRSRKAKMTAAQKQAATVGSKRAVKKEEGVLLTIQPKRLFKEDEKNVSLRKPLKPGRVVASRYSQMGKTQTGEKDVRKRSLPEDEEKENHKRSEKRRASDESNKSEGRVKKRWEIPSEVDLYSSGENGDESPIVKELPKIRTLRRVGGSPRDSGAAKRVAELOAKDRNFTFCOLLKFE

**FIGURE 4 (continued)**

9/10

SEQ ID NO 13: Sequence of the [PRO0090 - CDS0689 - terminator]  
expression cassette

**FIGURE 4 (continued)**

**10/10**

ttcttgataaaagtggatatacacaagccccggcggtcttctagggataacaggtaatta  
tatccctctagatcacaagccccggcggtcttctacgatgattgagtaataatgtgtcacgc  
atcaccatgggtggcagtgtcagtgtgagcaatgaccaatgaaatgaaaaga  
aaaaaaagatactccatctgttccaaattaaattcatttaacctttataggttatacaa  
taattgatataatgtttctgtatatgtctaatttgcattatccggcggtcttctagggat  
aacaggtaattatatccctctagacaacacacaacaaataagagaaaaaacaataatatt  
aatttgcataatgttccatccattacttccatccatttcac  
acagttcgatagcggaaaaccgaataaaaaacacagtaattacaagcacaacaaatggtaca  
agaaaaacagttcccaatgccataactcgaac

**SEQ ID NO 14: rice prolamin RP6 promoter sequence**

ccttctacatcggttaggttagcaacacgcactttattattattattattattat  
tattttacaaaaatataaaatagatcagtcctcaccacaaggtagagcaagttggtgagtt  
ttgtaaagttctacaaagctaattttaaagtattgcatttaacttatttcatattacaaaca  
agagtgtcaatggacaatgaaaaccatatgacatactataattttgttttatttattgaaa  
ttatataattcaagagaataatccacatagccgtaaaggtagtctacatgtggtgcattacca  
aaatataatatagtttacaaaacatgacaagcttagttgaaaaatttgcattatcacat  
tgacacataaagtggatgatgacttattttcttgcatttgcattatcatgtatatat  
gatagccacaaaggtagttacttgcatttgcattatcaagaacatttttaggtgcacctaacagaa  
tatccaaataatatgactcacttagatcataatagagcatcaagtaaaactaacactctaaa  
gcaaccgatggaaagcatctataatagacaagcacaatgaaaatcctcatcatccttcac  
cacaattcaaattatagttgaagcatagtagtagaaatccaacaaca

**SEQ ID NO 15: Motif 1 CORE SEQUENCE**

WXNAXXD

**SEQ ID NO 16: Motif 2 CORE SEQUENCE**

KENXXP

**SEQ ID NO 17: Motif 3 (coiled coil) CORE SEQUENCE**

EX<sub>1-6</sub>EXXRLXXXLXXLR

**SEQ ID NO 18: Motif 4 CORE SEQUENCE**

LPXIX<sub>1-10</sub>RDSGXXKRX<sub>1-6</sub>K

**FIGURE 4 (continued)**